

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 08/12/2003

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/444,121	11/19/1999	SANAA F. ABDELHADI	AUS990796US1	8236
75	90 08/12/2003			•
DUKE W YEE CARSTENS			EXAMINER	
YEE AND CAHOON LLP P O BOX 802334		NGUYEN, CHAU T		
DALLAS, TX	75380	•	ART UNIT	PAPER NUMBER
			2176	

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

4



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspro.gov



AUG 1 2 2003

Technology Center 2100

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 14

Application Number: 09/444,121 Filing Date: November 19, 1999 Appellant(s): ABDELHADI ET AL.

Patrick C.R. Holmes For Appellant

#### **EXAMINER'S ANSWER**

This is in response to the appeal brief filed on May 22, 2003.

## (1) Real Party in Interest

The appellant's statement of the real party in interest contained in the brief is correct.

Art Unit: 2176

#### (2) Related Appeals and Interferences

The appellants' statement of the related appeals and interferences contained in the brief is correct.

## (3) Status of Claims

The appellants' statement of the status of the claims contained in the brief is correct.

#### (4) Status of Amendments After Final

The appellants' statement of the status of amendments after final rejection contained in the brief is correct.

## (5) Summary of Invention

The summary of invention contained in the brief is correct.

## (6) <u>Issues</u>

The appellants' statement of the issues contained in the brief is correct.

# (7) Grouping of Claims

The appellants' statement of the grouping of the claims in the brief is correct.

#### (8) Claims Appealed

The copy of the appealed claims contained in the appendix pages 19-25 is correct.

#### (9) Prior Art of Record

Brobst et al., U.S. Patent Number 6,061,700, issued on May 9, 2000, but filed on August 8, 1997 (hereinafter Brobst).

<u>Dubbels</u> et al., U.S. Patent Number 6,222,634 B1, issued on April 24, 2001, but filed on July 11, 1997 (hereinafter <u>Dubbels</u>).

Hoffert et al., U.S. Patent Number 6,282,549 B1, issued on August 28, 2001, but filed on March 29, 1999 (hereinafter Hoffert).

Chandrasekhar <u>Narayanaswami</u> and Avijit Saha, UK Patent Application, GB Number 2,332,543 A, published on June 23, 1999 (hereinafter <u>Narayanaswami</u>).

# (10) New Prior Art

No new prior art has been applied in this examiner's answer.

# (11) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims 2-35:

Claims 2-7, and 19-24 are rejected under 35 U.S.C. 103(a) as being unpatentable by Brobst et al. (Brobst), Patent No. 6,061,700 in view of Dubbels et al.

Art Unit: 2176

(Dubbels), Patent No. 6,222,634, and further in view of Hoffert et al (Hoffert), Patent No. 6,282,549.

As to claim 2, Brobst taught the invention substantially as claimed, a method in data processing system for printing web pages, the method comprising the data processing system implemented steps of:

receiving a request a web page; (col. 3, lines 12-40; receives a web page request, then prints related web pages);

printing the web page and each web page associated with the web page (Abstract);

wherein the printing step prints each of a plurality of web pages associated with the web page on selected levels below the web page (col. 5, line 42 – col. 6 line 42: printing the web page that includes any nested levels below the web page);

However, Brobst did not teach the printing step automatically and individually prints each of a plurality of web pages. Dubbels taught a web page print mechanism automatically generating a web page that contains all the user-selected web pages and a web client print mechanism 320 that is used to print individual web pages (claim 1, and col. 5, lines 21-40). Since Dubbels taught these limitations in an environment such as a system for printing related web pages (levels below a selected web page) which is similar to the system of Brobst, thus, it would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of

Art Unit: 2176

Brobst and Dubbels to include the printing step automatically and individually prints each of a plurality of web pages in order to make the system more efficient.

Brobst and Dubbels taught the limitations as discussed above. However, Brobst-Dubbels did not teach if a first web page of the plurality appears more than once among the plurality, the first web page is only printed once. In the same field of endeavor, Hoffert teaches a hash table scheme is used to guarantee that only unique new URLs (web pages) are added to the database and if any URL link that is already found in the hash table, the URL is not added to the list of URLs for processing (col. 3, line 28 – col. 4, line 23). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Brobst-Dubbels and Hoffert to include a first web page of the plurality appears more than once among the plurality, the first web page is only printed once. By doing so, it would prevent printing duplicate data and also prevent the waste or loss of time and papers.

As to claim 3, Brobst-Dubbels-Hoffert taught the printing step comprising: sending the web page and each web page associated with the web page on selected levels below the web page to a printer (Brobst, col. 3, line 66 – col. 4, line 11).

As to claim 4, Brobst-Dubbels-Hoffert taught the printing step comprising: sending the web page and each web page associated with the web page on selected levels below the web page to a display device (Brobst, col. 3, line 66 – col. 4, line 11).

Art Unit: 2176

As to claim 5, Brobst-Dubbels-Hoffert teach the printing step comprising: sending the web page and each web page associated with the web page on selected levels below the web page to a file (Brobst, col. 3, line 66 – col. 4, line 11).

As to claim 6, Brobst-Dubbels-Hoffert taught the data processing system is a client computer (Brobst, col. 2, line 59 – col. 3, line 11; also note Fig. 2; workstation 200).

As to claim 7, Brobst-Dubbels-Hoffert taught the data processing system is a web server (Brobst, col. 2, line 59 – col. 3, line 11; also note Fig. 2; web server 220).

As to claim 19, Brobst taught the invention substantially as claimed, a data processing system for printing web pages, the data processing system comprising:

receiving means for receiving a request to print a web page (col. 3, lines 12-40); printing means for printing the web page and each web page associated with the web page on selected levels below the web page (Abstract; each web page and related pages to the web page are printed).

However, Brobst did not teach the printing step automatically and individually prints each of a plurality of web pages. Dubbels teaches a web page print mechanism automatically generating a web page that contains all the user-selected web pages and

Art Unit: 2176

a web client print mechanism 320 that is used to print individual web pages (claim 1, and col. 5, lines 21-40). Since Dubbels teaches these limitations in an environment such as a system for printing related web pages (levels below a selected web page) which is similar to the system of Brobst, thus, it would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of Brobst and Dubbels to include the printing step automatically and individually prints each of a plurality of web pages in order to make the system more efficient.

Brobst and Dubbels teach the limitations as discussed above. However, Brobst-Dubbels do not teach if a first web page of the plurality appears more than once among the plurality, the first web page is only printed once. In the same field of endeavor, Hoffert teaches a hash table scheme is used to guarantee that only unique new URLs (web pages) are added to the database and if any URL link that is already found in the hash table, the URL is not added to the list of URLs for processing (col. 3, line 28 – col. 4, line 23). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Brobst-Dubbels and Hoffert to include a first web page of the plurality appears more than once among the plurality, the first web page is only printed once. By doing so, it would prevent printing duplicate data and also prevent the waste or loss of time and papers.

As to claim 20, Brobst taught printing means comprises sending means for sending the web page and each web page associated with the web page on selected levels below the web page to a printer (col. 6, line 54 – col. 7, line 19).

As to claim 21, Brobst-Dubbels-Hoffert taught printing means comprises sending means for sending the web page and each web page associated with the web page on selected levels below the web page to a display device (Brobst, col. 6, line 54 – col. 7, line 19).

As to claim 22, Brobst-Dubbels-Hoffert taught printing means comprises sending means for sending the web page and each web page associated with the web page on selected levels below the web page to a file (Brobst, col. 6, line 54 – col. 7, line 19).

As to claim 23 Brobst-Dubbels-Hoffert taught the data processing system is a client computer (Brobst, col. 2, line 59 – col. 3, line 11; also note Fig. 2; workstation 200).

As to claim 24, Brobst-Dubbels-Hoffert taught the data processing system is a web server (Brobst, col. 2, line 59 – col. 3, line 11; also note Fig. 2; web server 200).

Since all the limitations of the claimed inventions were disclosed by the combination of Brobst, Dubbels, and Hoffert, claims 2-7 and 19-24 are rejected.

Art Unit: 2176

Claims 8-14, 25-31, and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable by Brobst et al. (Brobst), Patent No. 6,061,700 and further in view of Hoffert et al (Hoffert), Patent No. 6,282,549.

As to claim 8, Brobst taught the invention as claimed, a method in data processing system for printing web pages, the method comprising the data processing system implemented steps of:

responsive to an input selecting a current web page, determining whether a maximum depth for printing has been reached (col. 5, lines 42-67; on one selected web page, a user defines the nesting level, determines the depth into the nesting tree 400);

identifying a set of universal resource identifiers located within the current web page in response to the maximum depth being unreached (col. 6, line 54 – col. 7, line 19; when all web pages and their digging levels have been defined, a URL list of the web pages and the associated digging level is created);

retrieving the web page identified by the set of uniform resource locators (col. 7, lines 29-60; for each URL in the URL list, the URL is added to the URL container for retrieving);

printing each web page retrieved (col. 6, line 54 – col. 7, line 19; appending all related web pages together and print them);

However, Brobst did not teach wherein each web page retrieved is represented in a hash table, and wherein if a web page appears more than once in the hash table,

Art Unit: 2176

the web page is only printed once. In the same field of endeavor, Hoffert taught a hash

table scheme is used to guarantee that only unique new URLs (web pages) are added

to the database and if any URL link that is already found in the hash table, the URL is

not added to the list of URLs for processing (col. 3, line 28 - col. 4, line 23). Thus, it

would have been obvious to one of ordinary skill in the art at the time the invention was

made to combine the teachings of Brobst and Hoffert to include each web page

retrieved is represented in a hash table, and wherein if a web page appears more than

once in the hash table, the web page is only printed once. By doing so, it would prevent

printing duplicate data and also prevent the waste or loss of time and papers.

As to claim 9, Brobst-Hoffert taught the invention as claimed, repeating the

determining, identifying, retrieving, and printing steps for each web page until the

maximum depth has been reached (Brobst, col. 6, line 54 - col. 7, line 19; Also note

Fig. 6, 7, 8 and 9).

As to claim 10, Brobst-Hoffert taught the invention as claimed, printing step

comprises sending each web page to an output device (Brobst, col. 3, line 55 - col. 4,

line 11).

As to claim 11, Brobst-Hoffert taught the invention as claimed, the output device

is a printer (Brobst, col. 3, line 55 – col. 4, line 11).

Art Unit: 2176

As to claim 12, Brobst-Hoffert taught the invention as claimed, the output device is a display device (Brobst, col. 3, line 55 – col. 4, line 11).

As to claim 13, Brobst-Hoffert taught the invention as claimed, the data processing system is a client computer (Brobst, col. 2, line 59 – col. 3, line 11; also note Fig. 2; workstation 200).

As to claim 14, Brobst-Hoffert taught the invention as claimed, the data processing system is a web server (Brobst, col. 2, line 59 – col. 3, line 11; also note Fig. 2; web server 220).

Claims 25-31, 33-35 are corresponding system and product claims containing the similar limitations as the methods described in claims 8-14; therefore, they are rejected under the same rationale.

Since all the limitations of the claimed inventions were disclosed by the combination of Brobst and Hoffert, claims 8-14, 25-31 and 33-35 are rejected.

Claims 15 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brobst et al (Brobst) and Hoffert et al. (Hoffert) as discussed above, and further in view of Dubbels et al (Dubbels), Patent No. 6,222,634.

Art Unit: 2176

As to claim 15, Brobst-Hoffert taught the invention substantially as claimed, the determining, identifying, retrieving, and printing steps are performed (col. 6, line 54 – col. 7, line 19; Also note Fig. 6, 7, 8 and 9). However, Brobst and Hoffert did not teach the determining, identifying, and retrieving steps are performed in a web server and wherein the printing step is performed in a client computer. Dubbels taught a web page parsing and linking mechanism 350 is performed in a web server, and printing mechanism is performed in a web client (col. 5, line 40 – col. 6, line 61). Since Dubbels taught these limitations in an environment such as a system for printing related web pages (levels below a selected web page) which is similar to the system of Brobst, thus, it would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of Brobst and Dubbels to include the determining, identifying, and retrieving steps are performed in a web server and wherein the printing step is performed in a client computer in order to make the system more efficient.

Claim 32 is corresponding system claim containing the similar limitations as the methods described in claim 15; therefore, it is rejected under the same rationale.

Since all the limitations of the claimed inventions were disclosed by the combination of Brobst, Hoffert, and Dubbels, claims 15 and 32 are rejected.

Art Unit: 2176

Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brobst et al (Brobst) in view of Narayanaswami et al (Narayanaswami), UK Patent Application No. 2,332,543, and further in view of Hoffert et al. (Hoffert), Patent No.

6,282,549.

As to claim 16, Brobst taught the invention substantially as claimed, a method for

printing items comprising the data processing system implemented steps of:

receiving a request to print a current item, wherein additional items are

associated with the current item in relationship in which the additional items are on

levels below the current item (col. 5, lines 42-67; on one selected web page, a user

defines the nesting level, determines the depth into the nesting tree 400);

printing the current item (col. 2, line 59 – col. 3, line 40);

However, Brobst did not teach determining whether additional items on levels

below the current item are to be printed and responsive to a determination that

additional items are to be printed, printing the additional items. Narayanaswami taught

a user is able to select from a listing of the hyperlinks available on a target page for

subsequent print selection such as print current page, print to level, print designated

selections, and print "All But" selection (Abstract; Also note page 12, lines 7 - line 46).

Since Narayanaswami taught these limitations in an environment such as a system for

printing Internet document which is similar to the system of Brobst, thus, it would have

been obvious to one of ordinary skill in the Data Processing art at the time of the

Art Unit: 2176

invention to combine the teachings of Brobst and Narayanaswami to include determining whether additional items on levels below the current item are to be printed and responsive to a determination that additional items are to be printed, printing the additional items in order to make the system more efficient.

Brobst and Narayanaswami disclosed all the limitations as discussed above. However, Brobst and Narayanaswami did not disclose wherein if a first item appears more than once among the additional items, the first item is only printed once. In the same field of endeavor, Hoffert taught a hash table scheme is used to guarantee that only unique new URLs (web pages) are added to the database and if any URL link that is already found in the hash table, the URL is not added to the list of URLs for processing (col. 3, line 28 – col. 4, line 23). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Brobst and Narayanaswami and Hoffert to include wherein if a first item appears more than once among the additional items, the first item is only printed once. By doing so, it would prevent printing duplicate data and also prevent the waste or loss of time and papers.

As to claim 17, Brobst-Narayanaswami-Hoffert taught the invention as claimed, the items are web pages associated using universal resource identifiers (Brobst, col. 7, lines 29-59).

As to claim 18, Brobst-Narayanaswami-Hoffert taught the invention as claimed, the items are files associated using directories (Brobst, col. 3, line 66 – col. 4, line 11).

Since all the limitations of the claimed inventions were disclosed by the combination of Brobst, Narayanaswami, and Hoffert, claims 16-18 are rejected.

#### (12) Response to Argument

The examiner summarizes the various points raised by the appellant and addresses replies individually.

As per appellants' arguments filed on May 22, 2003, the appellants argue in substance:

#### Group A

"Claim 2 includes the limitation, 'wherein if a first web page of the plurality appears more than once among the plurality, said first web page is only printed once.' It is respectfully submitted that this limitation is not shown in any of the references which the Examiner seeks to combine." (see page 5 of the brief).

<u>In reply</u> to argument in group A, the appellants' argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so

Art Unit: 2176

found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Brobst and Dubbels taught printing a web page that includes any nested levels below the web page (see Brobst, col. 5, line 42 – col. 6, line 42 and Fig. 4). In Fig. 4, when a first selected web page 411 is selected to be printed, any nested levels below the selected web page can be printed out also, such as printing the selected web page, printing nesting level 1 containing Link 1, Link 2, and Link 3, printing nesting level 2 containing Link A, Link B, Link D, Link F, and Link G, and printing nesting level 3 containing Link I, Link II, Link III, Link IV, Link V, Link VI, Link VII, Link VIII, Link IX, Link X, and Link XI. In addition, Brobst teaches a method using recursive function to dig nested levels of relating URLs (web pages), add them into a URL container, and then print them.

However, Brobst and Dubbels did not teach wherein if a first web page of the plurality appears more than once among the plurality, said first web page is only printed once. An artisan working with Brobst and Dubbels would be motivated to search for other printing system that can print web pages only once instead of printing duplicate ones.

In the same view of endeavor, Hoffert taught "when a new site is found by the crawler, there is a check against the internal database to ensure that the site has not already been visited; this guarantees that the crawler only indexes unique sites within its

Art Unit: 2176

database, and does not index the same site repeatedly. A hash table scheme is used to guarantee that only unique new URLs (web pages) are added to the database and if any URL link that is already found in the hash table, the URL is not added to the list of URLs for processing (col. 3, line 28 – col. 4, line 23). Since Hoffert provided a description of a method for crawling and indexing web pages, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the indexing web page method of Hoffert into the printing web page system of Brobst and Dubbels to include if a first web page of the plurality appears more than once among the plurality, the first web page is only printed once. By doing so, it would prevent printing duplicate data and also prevent the waste or loss of time and papers.

1. "Brobst and Dubbels teach away from the combination with Hoffert." (see page 6 of brief)

In reply to argument 1 in group A, the appellants' argument that "Brobst and Dubbels teach away from the combination with Hoffert", the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary references; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). The conclusion

Art Unit: 2176

of obviousness may be made from common knowledge and common sense of a person of ordinary skill in the art without any specific hint or suggestion in a particular reference. In re Bozek, 416F.2d 738, 1385 USPQ 545 (CCPA 1969).

Brobst-Dubbels did not explicitly teach if a first web page of the plurality appears more than once among the plurality, the first web page is only printed once. In the specification, Applicants described a method for printing web page such as "all links that have been selected for printing may be stored in a hash table in which each entry contains a URL and a file name. If the mechanism of the present invention identifies a link that matches an entry into hash table, this link is not retrieved or printed" (page 15, line 30 – page 16, line 5). An artisan working with Brobst-Dubbels would be motivated to search for a hash function that can store only unique URLs to combine with the printing methods of Brobst-Dubbels to print out web pages without any duplication.

Hoffert taught "when a new site is found by the crawler, there is a check against the internal database to ensure that the site has not already been visited; this guarantees that the crawler only indexes unique sites within its database, and does not index the same site repeatedly. A hash table scheme is used to guarantee that only unique new URLs (web pages) are added to the database and if any URL link that is already found in the hash table, the URL is not added to the list of URLs for processing (col. 3, line 28 – col. 4, line 23). Since Hoffert provided a description of a method for crawling and indexing web pages by having only unique URLs in a hash table, it would have been obvious to one of ordinary skill in the art at the time the invention was made

Art Unit: 2176

Y

to have incorporated the indexing web page method of Hoffert into the printing web page system of Brobst and Dubbels to include if a first web page of the plurality appears more than once among the plurality, the first web page is only printed once. By doing so, it would prevent printing duplicate data and also prevent the waste or loss of time and papers.

2. The hash table of Hoffert serves a different purpose in Hoffert than in the cited reference. Hoffert must also be modified in order to teach the claimed limitations of the present invention, and no such modification is shown or suggested in the cited references. (See brief, page 8)

In reply to argument 2 in group A, the appellants' argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). Also, In re Mclaughlin, 443 F.2d 1392, 170 USPQ 209 (CCP 1971), clearly states "any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning, but so long as it takes into account only knowledge which was within level of

Art Unit: 2176

ordinary skill at the time claimed invention was made and does not include knowledge

gleaned only from applicants' disclosure, reconstruction is proper".

In this case, since Hoffert taught the use of a hash table to guarantee that only unique new URLs are added to the database (col. 3, lines 13-54), thus it would have

been obvious to one of ordinary skill in the art at the time the invention was made to

have incorporated the hash table to guarantee that only unique new URLs are added to

the database of Hoffert into the printing web page system of Brobst and Dubbels to

include if a first web page of the plurality appears more than once among the plurality,

the first web page is only printed once. By doing so, it would prevent printing duplicate

data and also prevent the waste or loss of time and papers.

Group B

a) "Claim 8 includes the limitation, 'wherein each web page retrieved is

represented in a hash table, and wherein if a web page appears more than once in the

hash table, said web page is only printed once.' It is respectfully asserted that this

limitation is not taught by any of the cited references. (See brief page 14)

in reply to a) argument in Group B, the appellants' arguments against the

references individually, one cannot show nonobviousness by attacking references

individually where the rejections are based on combinations of references. See In re

Art Unit: 2176

Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Brobst taught printing a web page that includes any nested levels below the web page (see Brobst, col. 5, line 42 – col. 6, line 42 and Fig. 4). In Fig. 4, when a first selected web page 411 is selected to be printed, any nested levels below the selected web page can be printed out also, such as printing the selected web page, printing nesting level 1 containing Link 1, Link 2, and Link 3, printing nesting level 2 containing Link A, Link B, Link D, Link F, and Link G, and printing nesting level 3 containing Link I, Link III, Link IV, Link V, Link VI, Link VIII, Link IX, Link X, and Link XI. In addition, Brobst taught a method using recursive function to dig nested levels of relating URLs (web pages), add them into a URL container, and then print them.

However, Brobst did not explicitly teach wherein each web page retrieved is represented in a hash table, and wherein if a web page appears more than once in the hash table, said web page is only printed once. An artisan working with Brobst would be motivated to search for a hash table that can perform function printing web pages only once instead of printing duplicate ones.

In the same view of endeavor, Hoffert taught "when a new site is found by the crawler, there is a check against the internal database to ensure that the site has not already been visited; this guarantees that the crawler only indexes unique sites within its database, and does not index the same site repeatedly. A hash table scheme is used to guarantee that only unique new URLs (web pages) are added to the database and if

Art Unit: 2176

papers.

any URL link that is already found in the hash table, the URL is not added to the list of URLs for processing (col. 3, line 28 – col. 4, line 23). Since Hoffert provided a description of a method for crawling and indexing web pages, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the hash table to guarantee that only unique new URLs are added to the database of Hoffert into the printing web page system of Brobst to include wherein each web page retrieved is represented in a hash table, and wherein if a web page appears more than once in the hash table, said web page is only printed once. By doing so, it would prevent printing duplicate data and also prevent the waste or loss of time and

b) "Furthermore, though Hoffert was not allowed until Aug. 28, 2002, the hash table teachings therein were known at least as early as April 30, 1997 (the filing date of the application from which Hoffert continued—see section (63) on the cover page of Hoffert). Hence, the hash table teaching would have been available to the inventors of Brobst and Dubbels. However, neither of those references makes use of a hash table to deal with the problem of recursive or redundant printing of web pages." (See brief page 17)

<u>In reply</u> to b) argument in Group B, the appellants' arguments stated "the hash table teachings therein were known at least as early as April 30, 1997". Since the hash table was well known in prior art, it would have been obvious to one of ordinary skill in

Art Unit: 2176

the art at the time the invention was made to combine the hash table scheme is used to

guarantee that the only unique new URLs are added to the database of Hoffert into

printing URLs of Brobst to include each web page retrieved is represented only once.

By doing so, it would prevent printing duplicate data and also prevent the waste or loss

of time and papers.

For the above reasons, it is respectfully submitted that the rejections should be

sustained.

Conferee:

Dung C. Dinh Primary Examiner Respectfully Submitted,

Page 23

Chau Nguyen

PRIMARY EXAMINER